# Pend Oreille River TMDL Watershed Advisory Group Meeting Summary Thursday, May 25, 2006 American Lutheran Church, Newport WA

## **Attendees**

Ken Auston, City of Newport; Randy Curliss, City of Dover; Glenda Empsall, Riley Creek Lumber; Jenna Borovansky, Idaho DEQ; Ted Runberg; Karin Baldwin, Washington DOE; Christine Pratt, Seattle City Light; Scott Jungblom, Pend Oreille PUD; Michele Wingert, Kalipsel Tribe; Don Martin, EPA; Don Comins, Pend Oreille Conservation District; Kevin Kinsella, Pend Oreille Mine; Karen Kinsella, Ione resident; Patty Perry, Kootenai Tribe; Mike Lithgow, Pend Oreille County Planning Dept; Paul Pickett, Washington DOE; Kate Wilson, Lakes Commission; Jean Parodi, Washington DOE; Ed Tulloch Idaho DEQ; Lori Blau, Ponderay Newsprint Co.; Ruth Watkins, TSWQC.

#### Welcome and introductions

Ruth gave a brief summary of the first meeting of the group and provided an overview of today's meeting and agenda items.

## Pend Oreille River mainstem, Total Dissolved Gas (TDG)

## TDG in Washington:

Paul Pickett gave a power point presentation on the Washington Dept. of Ecology draft TDG TMDL technical report. Some of his main points included:

- At peak flows in the spring (from mid-April to mid-July in our area), dam spills create TDG—high gas pressure results when water plunges to certain depths—which can cause gas bubble trauma and fatalities in fish.
- The national criteria for TDG is110% saturation, which is also the Washington State and Kalispel Tribal standard. Severe problems can occur at 130% saturation.
- The state is doing a TMDL because TDG levels during peak flows exceed state water quality criteria.
- The jurisdictions in Washington are the Dept of Ecology and the EPA as lead for the tribe.
- Paul reviewed the findings from Box Canyon and Boundary monitoring (TDG monitoring locations in Washington include Newport, Ruby, Box Canyon (Ione), & Boundary.)
- At Box Canyon, spills above 5,000 cfs are causing TDG increases. Pend Oreille PUD is working on a TDG abatement plan.
- At Boundary, high upstream TDG levels mask the effect of spills (i.e., levels are already high coming from upstream). If the fore bay were in compliance, there are increased levels of TDG at spills of 4,000 cfs. TDG is often greater than 110% when there are no spills, which could be related to certain turbines; there are probably some operational solutions that could resolve this situation.
- Conclusions of the monitoring were:
  - o Most impairment at the Idaho state line is caused by upstream conditions
  - o Temperature effects on TDG levels are usually offset by wind or biological productivity
  - o Increases in TDG-producing impairments in the reservoirs are rare (amount of increase is small)

#### • The TDG TMDL:

- o Allocations will be set at 110% saturation at low barometric pressure.
- O Compliance area Pend Oreille River in Washington except at aerated ("bubbly") zones a few thousand feet below the dams at tailraces. (These locations will be identified in the implementation plan.)
- Compliance flows (1) Idaho state line to Kalispel Reservation: TDG criteria to be met at all flows, which protects tribal standards. (2) Kalispel Reservation to International Border: TDG criteria to be met only below 7Q10 flood flows.
- The technical document is undergoing informal review right now. When it is finalized, it will include an implementation plan for the TMDL, mostly focusing on the 401 certifications for the 2 dams. (Normally the Detailed Implementation Plan follows after a TMDL is finalized while a Summary Implementation Strategy is part of it.) The plan will include compliance and monitoring requirements.
- The public comment period will take place in late summer, early fall.
- Washington develops the TMDL for state waters and submits to EPA. EPA adopts the TMDL for tribal waters.
- Paul passed around a sign-up sheet for copies of the report. Ruth will contact those who did not attend to see if they want a copy as well.

#### TDG in Idaho:

Ed Tulloch reported that DEQ's current focus is on TMDLs for the Clark Fork, Kootenai and Moyie drainages. A draft concept of the TDG TMDL for the Clark Fork River was presented to the Clark Fork WAG earlier this week. DEQ's efforts so far have been concentrated on Cabinet Gorge Dam impacts to the Clark Fork River and have not started working yet on the Pend Oreille River (Albeni Falls) TDG issue. Fortunately, the TDG criteria of 110% saturation is the same in Idaho, Washington and Montana, which should make things easier when dealing with upstream/downstream TDG issues.

Ed also reported that Jenna Borovansky and Bob Steed will be moving into Pend Oreille River TMDL work as the Clark Fork and Kootenai-Moyie TMDL work winds down.

# Pend Oreille River Mainstem Temperature, Washington

- Paul noted that a coordinated effort is taking place with temperature modeling
  that includes a Portland State University modeling effort for Idaho (for temperature and
  nutrients) and new temperature data being added by Portland State University to an upgraded
  version of the Pend Oreille PUD's model for the Box Canyon Dam reservoir in Washington.
  Also Seattle City Light will be calibrating a temperature model this summer for the Boundary
  Dam reservoir.
- Lori asked if modeling will include lake levels in Idaho and Ed responded that he thinks this will be factored in. He noted that Bob Steed will be the contact for the modeling efforts in Idaho, and Lori will contact Bob to find out more on the lake level question.

## Pend Oreille River Mainstem Temperature, Idaho

- Ed stated that the law in Idaho requires WAGs to look at the water quality criteria and beneficial uses. He said our group will need to have a discussion about designated uses in the near future to satisfy this requirement
- He noted that at the next meeting we will need to discuss the differences in

- temperature criteria. Temperature is very controversial in Idaho, both the mainstem and the tributary streams.
- Lake Pend Oreille is not listed for temperature but the Pend Oreille River is listed for temperature.
- Idaho will be reviewing and changing the current state temperature criteria. The state will probably either accept EPA's criteria or adopt Oregon's or Washington's criteria. Another possibility would be to develop site-specific standards across the state, but this is probably not likely. Although the new criteria is not certain, it is certain that the current criteria of 19<sup>0</sup>(daily average)/22<sup>0</sup>(daily maximum) will be changing.
- The Idaho Natural Conditions Provision will stay the same (EPA has approved this.) Ed explained the provision, which states that numeric criteria do not apply if natural background exceeds the numeric limits; temperatures cannot measurably exceed natural background levels (0.3°C).
- The model being developed by PSU will help determine natural background conditions; the natural background provision is likely the criteria on which the river TMDL will be based.
- Ed noted that PSU has recently finished the hydrologic and temperature calibration on the model and that DEQ is securing funding for PSU to run and report on various scenarios for the river temperature TMDL; the model will also be looking at river nutrients.
- Randy asked about temperature influence on TDG. Paul responded that temperature is cooler in the spring and warmer in the fall so it is likely it is not an influence.

#### Pend Oreille River Tributaries, Idaho

Ed reviewed information about tributary TMDLS in Idaho:

- Idaho has a 2007 deadline for completing TMDLs in the Pend Oreille basin.
- Many TMDLs are already completed for sediment impairment in tributaries (2001) and nutrient impairment in the nearshore areas of the lake (2004).
- Additional tributary TMDLs are needed based on the recently approved 2002 Integrated Report.
- Ed showed a map of tributaries in the Pend Oreille basin that includes not only tributaries to the Pend Oreille River, but also to the Pack River, and the Cocollalla, Gold Creek and Clark Fork sub-watersheds. Many of the TMDLs to be completed are for temperature.
- He noted that one topic for a future meeting would be the potential natural vegetation models that are being developed for temperature TMDLS for tributaries.
- Ed described the process for WAG participation in Idaho and is hopeful that the Pend Oreille WAG will be willing to serve as the overall discussion body for the Pend Oreille River tributary TMDLs, with perhaps "sub-groups" participating at the local tributary level. Patty remarked that separate WAGs may be necessary for the other tributary areas and that the Pend Oreille WAG may not be able to fill the WAG requirements for other tributaries.
- Lori suggested that perhaps other stakeholders and sub-groups would get involved if the WAG meetings were done via conference calling to make it easier for others to get involved, especially if we could get them the materials ahead of time.
- It was agreed that the tributary WAG question would need to be a topic for future discussion.

# Pend Oreille River Tributaries, Washington

Karin gave an overview of the Colville National Forest TMDL, which was the first of its kind (covered the entire forest) and includes temperature and fecal coliform.

- Work on the TMDL started in 2002 and data collection occurred in 2002, 2003 & 2004. The summary strategy was developed in 2005 and submitted to EPA in June of 2005; it was approved in August 2005. They are now working on a detailed implementation plan.
- 37 sites did not meet the state temperature criteria. The TMDL allocation is based on *percentage* of effective shade. The TMDL concludes that 80 % effective shade is needed to meet the temperature standard of 16° and the Forest Service will have 50 years to meet the standard.
- 13 sites exceeded the standard for fecal coliform. The intent of the TMDL is to reduce fecal coliform with BMP's for management of recreation, livestock etc. The Forest Service will have 7 years to meet fecal coliform standards.
- The implementation plan will rely on the Forest Service to follow through on management strategies in the Forest Plan, Inland Native Fish Strategy (INFISH), and use of the Environmental Management System.
- EPA disapproved the Washington temperature standards from 2003 (not protective enough of Bull Trout). The Colville TMDL is based on the 16° standard of the 1997 standards, which was in effect when the TMDL was developed.
- Public comment on the implementation plan is anticipated to be in June/July. It was suggested that the WAG and the TSWQC could help distribute announcements about the detailed implementation plan and requests for public comment.

#### Pend Oreille Conservation District Monitoring

Don Comins reported that the Conservation District received a 319 grant last year for monitoring support for Colville TMDL.

- Russ is the project manager, he has been out with the Forest Service and have used the Tribe's maps to identify sampling locations. Monitoring will be conducted for fecal coliform, temperature, flow, pH, D.O., air temperature and other field parameters.
- Monitoring will be conducted to identify sources and assess on-the-ground improvements that result from the TMDL, on private and Forest Service land.
- Focus locations will be in areas of the largest range allotments.
- The QAPP has been signed by Washington DOE and the MOU on the grant is currently in the works.
- Don will look into putting the QAPP on the District's website and will keep us posted on this.

#### Kalispel Tribe Monitoring

Michele reported that the Tribe has been monitoring since 2001. There are 26 seasonal sites from Priest Lake (added in 2004) to the Pend Oreille River, and 40

Year-round sites monitoring pH, D.O., temperature, turbidity and stream flow.

- Continuous flow monitoring was initiated at 15 sites in 2003.
- A Pend Oreille River temperature profile was created with a string of thermographs. The profile showed that the bottom of the river and upper mid-sections are slightly warmer and that the top of the river and lower mid-sections are slightly cooler.

#### Next meeting

The agencies noted that the next WAG meeting would likely be in the August/September timeframe. In July there will be a technical group conference call to discuss the model calibration results and the group will know more at that time and we will plan the next meeting accordingly.

# Potential topics will include:

- Idaho and Washington model scenarios, calibration results
- Modeling approach on tributaries (Jenna)
- Temperature 101 look at criteria and potential natural vegetation approach
- How to apply temperature standards, public comment on standards
- Regional temperature guidance temperature criteria presentation, Washington, Oregon & Tribes (Don Martin)
- Seattle City Light's temperature model (Christine)

Meeting adjourned at 4:00 pm.